

REMARKS/ARGUMENTS

Claims 1-12, 15-21, and 24-30 are pending.

Claims 1-12 and 15-21 have been amended.

Claims 13-14 and 22-23 have been canceled.

Claims 24-30 have been added.

Support for the amendments is found in the claims and specification, as originally filed. Support for the amendments of claims 1 and 7 and new claims 24-26 and 29-30 can be found at page 1, lines 1-26, and original claim 13. Support for new claims 27-30 can further be found in claims 10-11, Table 1 at page 8, page 1, lines 1-26, and original claim 13.

Claims 1-23 are rejected under 102(b) or 103(a) over Sugiura, US 6,054,401.

Claims 1-9, 12, 15-18, and 21 are directed to a glass substrate for an emissive display, wherein a glass comprises a composition comprising the constituents below, in the following proportions by weight :

SiO ₂	67.5 - 75 %
Al ₂ O ₃	0.5 - 1 %
ZrO ₂	2 - 7 %
Na ₂ O	2 - 9 %
K ₂ O	4 - 11 %
MgO	0 - 5 %
CaO	5 - 10 %
SrO	5 - 12 %
BaO	0 - 3 %
B ₂ O ₃	0 - 3 %
Li ₂ O	0 - 2 %

with the relationships :



and said composition having a thermal expansion coefficient between 80 and $90 \times 10^{-7}/^\circ\text{C}$.

Claims 10-11, 19-20, and 27-28 further limit the glass to have viscosity of $\log \eta = 3.5$ or $\log \eta = 2$.

Claims 24-26 and 29-30 are directed to an emissive display comprising the claimed glass substrate.

Sigiura discloses a fireproof sheet glass composition comprising constituents described at col. 2. Sigiura concerns the problem of improving fire resistance of soda-lime glass sheets and is silent with regard to yellowing of glass substrates for emissive displays.

The claimed glass substrate is manufactured for an emissive display. The technical problem of the present invention intends to solve is to improve the yellowing resistance of a glass substrate for emissive displays (page 1). As described at page 1 of the specification, the substrates made of the silica-soda-lime glass, which bear heat-treated silver-based layers, have a tendency to develop a yellow coloration that contributes to the degradation of the quality of the image. The claimed glass shows reduced yellow color which is obtained by using a combination of a high content of SiO_2 (higher than 67%), a very low Al_2O_3 content (0.5-1%) and low ZrO_2 content (2-7%).

Although Sigiura generally discloses content of SiO_2 being 56-68% (col. 2), all example have significantly lower content of silica. Table 1 shows that the glass of Examples 1-8 comprises 57-65% of silica, which is outside of the claimed range. Comparative Example 9 comprising 72.1% of silica (i.e., within the claimed range) does not produce glass having satisfactory fireproof characteristics (col. 8).

Although Sigiura generally discloses content of Al_2O_3 being 0.2-5%, all example have significantly higher content of Al_2O_3 . Table 1 shows that Examples 1-6 comprise 4.8-1.2 of Al_2O_3 , which is outside of the claimed range. Examples 7-8 comprising 0.3 and 0.6% of Al_2O_3 (i.e., within the claimed range) but the content of silica is much lower than that claimed.

Thus, Sigiura's Examples 1-9 do not have a single combination that satisfies the claimed characteristics because Sigiura does not concern with the yellowing reduction for an emissive display, but only intends to improve fire resistance. One would not have been motivated by Sigiura to select a glass substrate having a high content of SiO_2 , a very low Al_2O_3 content and a low ZnO_2 content to arrive at yellowing resistant glass substrates for an emissive display since Sigiura deals with modifying the fireproof sheet glass to improve fire resistance (col. 1).

Sigiura does not teach or suggest a glass substrate for an emissive display having the specific viscosity of claims 10-11, 19-20, and 27-28. This specification discloses that viscosity is important for manufacturing of stable glass substrates (pages 4-5). Sigiura describes the fireproof glass having viscosity 7.65 (page 7, lines 26-29) (claimed viscosity is 2 and 3.5).

Sigiura does not teach or suggest an emissive display comprising a glass substrate of claims 1, 27, and 28.

Applicants request that the rejection be withdrawn.

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A Notice of Allowance for all pending claims is requested.

Respectfully submitted,

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